

WHAT IS CLAIMED IS:

1. A display system, comprising:
 - a) a light writable display associated with an identification code and arranged to receive an image wise pattern of light to form an image on the display;
 - b) a display writer for producing the image wise pattern of light for writing the image on the display;
 - c) a scanner connected to the display writer for sensing the identification code; and
 - d) a processor linked to the scanner and the display writer and responsive to the identification code for programming the display writer to write an image associated with the identification code.
2. The display system claimed in claim 1, wherein the identification code is a UPC (Universal Product Code).
3. The display system claimed in claim 1, wherein the identification code is on a holder for the light writable display.
4. The display system claimed in claim 1, wherein the light writable display is a shelf tag.
5. The display system claimed in claim 1, wherein the light writable display is a product label.
6. The display system claimed in claim 1, wherein the light writable display is a shelf talker.

7. The display system claimed in claim 1, wherein the identification code is on a light writable display.

8. The display system claimed in claim 1, further comprising a central processor containing display information associated with the identification code that is linked to the scanner and the display writer by a wireless communication link.

9. The display system claimed in claim 1, wherein the light writable display includes: a pair of conductors, at least one conductor being transparent; a layer of cholesteric liquid crystal material disposed between the conductors, the cholesteric liquid crystal material having multiple stable optical states at zero electrical field; and a light absorber for forming an image wise thermal pattern in the cholesteric liquid crystal sufficient to change the optical state of the cholesteric liquid crystal in response to an image wise pattern of light.

10. The display system claimed in claim 9, wherein the light writable display is attached to a support having contacts for making contact with the conductors on the light writable display and for providing external access to the conductors.

11. The display system claimed in claim 10, wherein the support includes a printable surface.

12. The display system claimed in claim 11, wherein the identification code is printed on the printable surface of the support.

13. The display system claimed in claim 10, wherein the display writer includes: a light source for producing a flash unit of light of sufficient intensity to generate sufficient heat in the light absorber to change the optical state

of the cholesteric liquid crystal; an electronically programmable mask located between the light source and the display for defining the image wise pattern of light; a display drive connectable to the contacts for generating an electric field between the conductors for changing the optical state of the cholesteric liquid crystal; and a controller connected to the light source and the display drive for controlling the intensity of the electrical field and actuating the light source to create an image on the display.

14. The display system claimed in claim 10, wherein the contacts are conductive ink.

15. The display system claimed in claim 10, wherein the conductive ink is carbon in a polymer binder.

16. The display system claimed in claim 10, wherein the display is attached to the support by the conductive ink.

17. The display system claimed in claim 10, wherein the display is attached to the support by an anisotropic conductive adhesive providing electrical connection between the conductors of the display and the contacts on the support.

18. The display system claimed in claim 10, wherein the support has an adhesive backing.

19. The display system claimed in claim 10, wherein the polymer dispersed material is a dried emulsion of cholesteric liquid crystal in gelatin.

20. The display system claimed in claim 1, wherein the scanner is a bar code scanner.

21. The display system claimed in claim 1, wherein the scanner is a radio frequency tag scanner.

22. The display system claimed in claim 1, wherein the scanner and the writer are included in a hand held unit.